OM of: US-09-236-995D-4 to: GenEmbl:* out_format : pfs

Date: Mar 9, 2002 7:48 PM

About: Results were produced by the GenCore software, version 4.5,
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Command line parameters:
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-DELEXT=7.000 -START=1 -MATRIX=blosum62 -TRANS=human40.cdi
-LIST=45 -DOCALIGN=200 -THR_SCORE=pct -THR_MAX=100 -THR_MIN=0
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Search information block:
Query: US-09-236-995D-4
Query length: 157
Database: GenEmbl:*
Database sequences: 1472140
Database length: -341344837
Search time (sec): 3984.260000

score_list:

Sequence	Strd	Orig	ZScore	EScore	Len	! Documentation ..
gb_pl:ZMPARP2	+	828.00	1723.52	1.0e-87	3211	! AJ222589 Zea mays mRNA for pol
gb_pl:AF093627	+	828.00	1723.31	1.0e-87	3285	! AF093627 Zea mays poly(ADP)-ri
gb_pl:ATH131705	+	697.00	1445.88	2.9e-72	3187	! AJ131705 Arabidopsis thaliana
gb_ro:RNPARP2	+	522.50	1080.62	6.5e-52	1939	! X65497 R.norvegicus mRNA for p
gb_ro:RNU94340	+	522.50	1076.13	1.2e-51	3128	! U94340 Rattus norvegicus poly(
gb_ro:MMADPRP	+	519.50	1069.64	2.7e-51	3172	! X14206 Mouse mRNA for poly (AD
gb_ro:AF168781	+	518.50	1067.90	3.3e-51	3047	! AF168781 Cricetulus griseus po
gb_ro:BC012041	+	518.50	1065.71	4.4e-51	3845	! BC012041 Mus musculus, Similar
gb_pr:HUMADPPO	+	517.50	1070.87	2.3e-51	1771	! M17081 Human placental poly(AD
gb_pr:HUMPOLP	+	517.50	1064.11	5.4e-51	3640	! M18112 Human poly(ADP-ribose)
gb_pat:A52134	+	517.50	1063.73	5.7e-51	3792	! A52134 Sequence 1 from Patent
gb_pr:HUMRISDAD	+	517.50	1063.72	5.7e-51	3795	! J03473 Human poly(ADP-ribose)
gb_ro:AF126717	+	516.50	1068.96	2.9e-51	1732	! AF126717 Mus musculus msPARP m
gb_pl:AC006593	-	512.50	1024.55	8.6e-49	79663	! AC006593 Arabidopsis thaliana
gb_ov:XLPARPG	+	511.50	1051.45	2.7e-50	3617	! Z12139 X.laevis PARP gene encd
gb_ov:XELPADPRP	+	511.50	1051.19	2.8e-50	3718	! D14667 Frog mRNA for poly(ADP-
gb_ov:GGPADPRP	+	508.50	1046.73	5.0e-50	3036	! X52690 Chicken mRNA for poly(A
gb_om:BOVPAS	+	506.50	1040.92	1.1e-49	3589	! D90073 Bovine poly(ADP-ribose)
gb_pat:I14359	+	503.50	1034.16	2.5e-49	3747	! I14359 Sequence 5 from patent
gb_pat:AX058340	+	500.50	1029.75	4.4e-49	3045	! AX058340 Sequence 24 from Pate
gb_pat:AX062277	+	500.50	1029.75	4.4e-49	3045	! AX062277 Sequence 136 from Pat
gb_pr:HUMPPOL	+	500.50	1028.02	5.5e-49	3660	! M32721 Human poly(ADP-ribose)
gb_pl:ATPARP	+	496.50	1024.54	8.6e-49	2147	! Z48243 A.thaliana PARP mRNA fo
gb_in:SPEPADPRP	+	483.00	991.44	6.0e-47	3463	! D16482 Sarcophaga peregrina mR
gb_pl:ZMPARP1	+	453.50	932.76	1.1e-43	2295	! AJ222588 Zea mays mRNA for pol
gb_in:DMPARP5	+	451.00	929.63	1.7e-43	1822	! AF051548 Drosophila melanogast
gb_in:DROADPRPA	+	451.00	924.70	3.1e-43	3080	! D13806 Fruit fly mRNA for poly
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gb_in:AE002892	+	451.00	908.75	2.4e-42	16864	! AE002892 Drosophila melanogas
gb_pr:GORADPRB	+	445.50	907.12	3.0e-42	5787	! L24094 Gorilla gorilla ADP-rib
gb_pat:AX058382	+	441.50	918.64	6.8e-43	687	! AX058382 Sequence 66 from Paten
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gb_pr:S54638	+	435.50	893.14	1.8e-41	2682	! S54638 (pseudogene) (A)=poly(A
gb_pat:I14360	+	435.50	886.67	4.1e-41	5345	! I14360 Sequence 7 from patent
gb_pr:HUMPADPRPZ	+	435.50	881.52	8.0e-41	9254	! L14752 Homo sapiens poly(AD
gb_pr:AL442128	+	435.50	855.07	2.4e-39	155026	! AL442128 Human DNA sequen
gb_pat:AX058338	+	434.50	895.26	1.4e-41	1707	! AX058338 Sequence 22 from P
gb_ro:MMU7780	+	434.50	895.26	1.4e-41	1707	! AJ007780 Mus musculus mRNA

seq_name: gb_pl:ZMPARP2

seq_documentation_block:

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LOCUS       ZMPARP2      3211 bp    mRNA            PLN       19-NOV-1997
DEFINITION  Zea mays mRNA for poly(ADP-ribose) polymerase (3211bp).
ACCESSION   AJ222589
VERSION     AJ222589.1  GI:2632128
KEYWORDS    PARP gene; poly(ADP-ribose) polymerase.
SOURCE      Zea mays.
  ORGANISM  Zea mays
            Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
            Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; PACC
            clade; Panicoideae; Andropogoneae; Zea.
REFERENCE   1  (bases 1 to 3211)
  AUTHORS   Babiychuk,E., Cottrill,P., Storozhenko,S., Fuangthong,M.,
            O'Farrell,M., Van Montagu,M., Inze,D. and Kushnir,S.
  TITLE     Higher plants possess two poly(ADP-ribose) polymerases
  JOURNAL   Unpublished
REFERENCE   2  (bases 1 to 3211)
  AUTHORS   Kushnir,S.
  TITLE     Direct Submission
  JOURNAL   Submitted (14-NOV-1997) Kushnir S., VIB, Dep.Genetics,
            Ledeganckstraat 35, Gent, B9000, Belgium
FEATURES             Location/Qualifiers
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ORIGIN
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alignment_block:
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Align seg 1/1 to: ZMPARP2 from: 1 to: 3211

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     51 GlnTyrCysTyrValAspArgAsnAsnProValGlyLeuMetLeuLeuSe 67
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   2999 GTGCGTTTCCATCACAAGAGG 3019
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seq_name: gb_pl:AF093627

seq_documentation_block:

LOCUS AF093627 3285 bp mRNA PLN 29-NOV-1998
DEFINITION Zea mays poly(ADP)-ribose polymerase (PARP1) mRNA, complete cds.
ACCESSION AF093627
VERSION AF093627.1 GI:3928870
KEYWORDS .
SOURCE Zea mays.
ORGANISM Zea mays
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; PACC clade; Panicoideae; Andropogoneae; Zea.
REFERENCE 1 (bases 1 to 3285)
AUTHORS Mahajan,P.B. and Zuo,Z.
TITLE Purification and cDNA cloning of maize Poly(ADP)-ribose polymerase
JOURNAL Plant Physiol. 118 (3), 895-905 (1998)
MEDLINE 99026291
REFERENCE 2 (bases 1 to 3285)
AUTHORS Mahajan,P.B. and Zuo,Z.
TITLE Direct Submission
JOURNAL Submitted (22-SEP-1998) Crop Protection, Pioneer HiBred International, Inc., 7300 NW 62nd Avenue, Johnston, IA 50131-1004, USA

FEATURES Location/Qualifiers
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BASE COUNT 1003 a 617 c 828 g 837 t
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Ratio: 5.274 Gaps: 0
Percent Similarity: 100.000 Percent Identity: 100.000

alignment_block:
US-09-236-995D-4 x AF093627 ..

Align seg 1/1 to: AF093627 from: 1 to: 3285

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1943 GTGTTAAGAAAGCACCAA                                  92

 633 LeuAlaProGlnLeuLeu                                  19
     ||||||||||||||||
1993 CTTGCTCCTCAATTGCTA                                 042

 649 rTyrArgAlaAlaMetMetGluPheGlu**                      66
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2043 ATATAGAGCTGCTATGATGGAATTTGAAATTAATATGTCAGAAATGCCTC 2092

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 683 ************LeuPheGluGlyHisArg***SerSerThrGlyLeu** 699
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2143 GAGATACAGAATTTATT.GAAGGACACCGCTGATCAAGCACTGGCTG.TT 2190

 699 *GluLysAla***LeuLeu***************PheSerLeuLeuSerL 716
      |||||||||   ||||||             |||  ||||||||||||||||||
2191 AGAGAAAGCTTAATTGTTGCTGCGAGCAATCGCTTTTTCACTCTTATCCC 2240

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 916 isSerThrLysGlyLeuGlyLysThrValProLeuGluSerGluPheVal 932
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DEFINITION  Zea mays mRNA for poly(ADP-ribose) polymerase (3211bp).
ACCESSION   AJ222589
VERSION     AJ222589.1  GI:2632128
KEYWORDS    PARP gene; poly(ADP-ribose) polymerase.
SOURCE      Zea mays.
  ORGANISM  Zea mays
            Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
            Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; PACC
            clade; Panicoideae; Andropogoneae; Zea.
REFERENCE   1  (bases 1 to 3211)
  AUTHORS   Babiychuk,E., Cottrill,P., Storozhenko,S., Fuangthong,M.,
            O'Farrell,M., Van Montagu,M., Inze,D. and Kushnir,S.
  TITLE     Higher plants possess two poly(ADP-ribose) polymerases
  JOURNAL   Unpublished
REFERENCE   2  (bases 1 to 3211)
  AUTHORS   Kushnir,S.
  TITLE     Direct Submission
  JOURNAL   Submitted (14-NOV-1997) Kushnir S., VIB, Dep.Genetics,
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BASE COUNT 968 a 604 c 813 g 826 t
ORIGIN

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Align seg 1/1 to: ZMPARP2 from: 1 to: 3211

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DEFINITION  Arabidopsis thaliana mRNA for poly(ADP-ribose) polymerase.
ACCESSION   AJ131705
VERSION     AJ131705.1  GI:4038490
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SOURCE      thale cress.
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REFERENCE   1  (bases 1 to 3187)
  AUTHORS   Kazmaier,M.
  TITLE     Direct Submission
  JOURNAL   Submitted (17-DEC-1998) Kazmaier M., Departement D'Ecophysiologie
            Vegetale Et De Microbiologie, Commissariat A L'energie Atomique,
            CEA Cadarache, Lab. De Radiobiol. Vegetale, Bat. 185, 13108 St.
            Paul-les-Durance, FRANCE
REFERENCE   2  (bases 1 to 3187)
  AUTHORS   Doucet-chabeaud,G. and Kazmaier,M.
  JOURNAL   Unpublished
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